IMACS Web Enablement

Interservice Material Accounting and Control System

Dave Crace/TRW

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IMACS Web Enablement

- **Objective**
  - **The goal of IMACS web enablement is to provide users access to IMACS using the internet with comparable or better functionality to the Advantage Gen GUI clients and Oracle Reports clients.**

IMACS Web Enablement

- Advantages of Web Enablement
  - Web Browser Access
  - Improved Navigation
  - Increased Application User Friendliness
  - Thin Client
  - Availability of Web Enhanced Features
  - Potential to Reduce Communication Issues
  - Maintain Parallel Client/Server Environment

IMACS Web Enablement

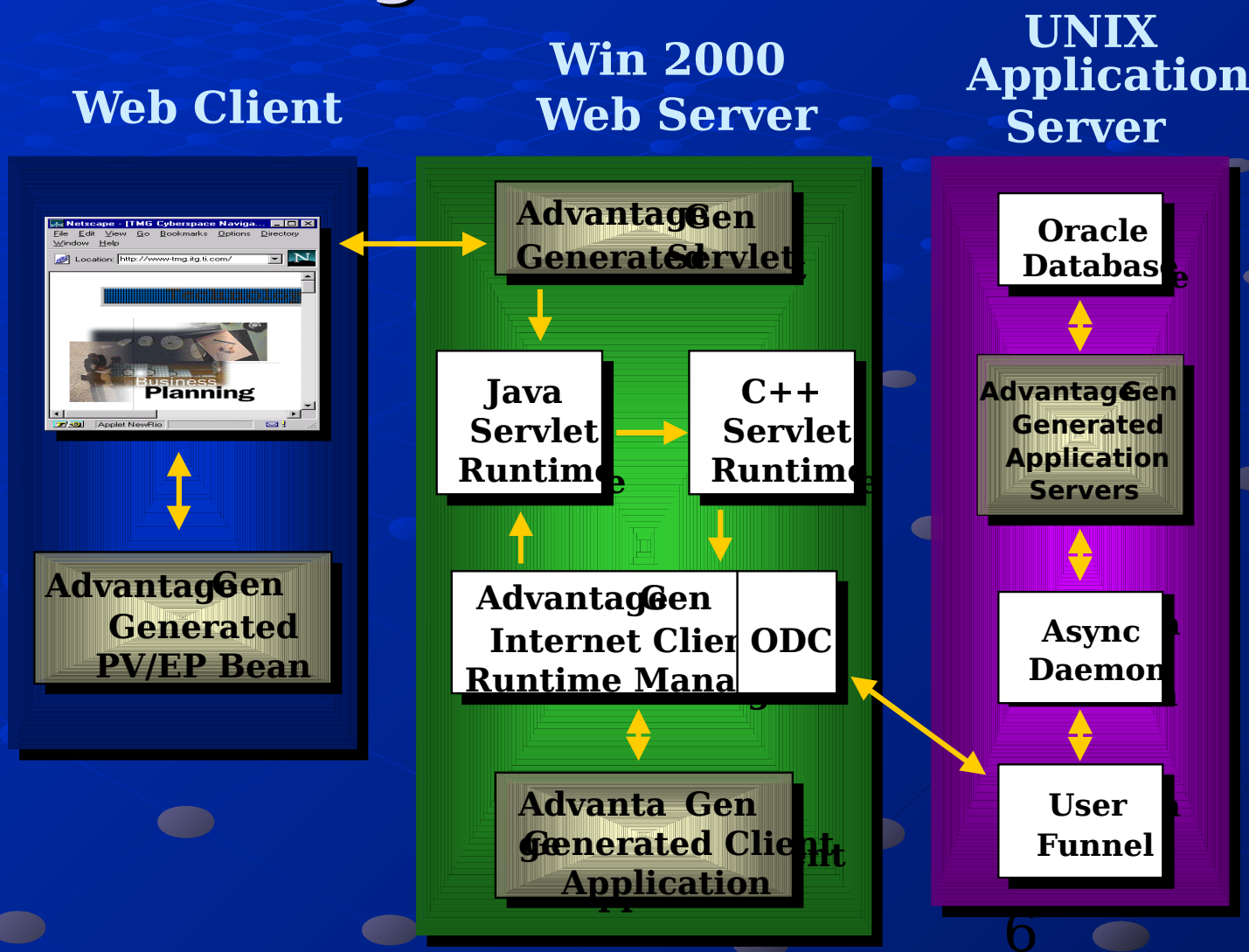
- Advantages of Web Enablement (Continued)
  - Increased user productivity
  - Potential increased user base
  - Software upgrades transparent to user
  - Faster deployment of application updates
  - Assist in moving toward DII/COE, PKI compliance

IMACS Web Enablement

- **Advantage Gen Web Client Enablement Tool**
  - **Automates generation of client Java, HTML, XML**
  - **Utilizes existing IMACS application model**
  - **Limits user participation**
  - **Facilitates application customization**
  - **Shortens development time**
  - **Lowers development cost**
  - **Maintains dual Web and Client/Server environments**

IMACS Web Enablement

Advantage Gen Environment



IMACS Web Enablement

- **Oracle Reports Web Architecture Software**
  - **Oracle Reports processing is moved from the workstation to the web server.**
  - **After recompiling, under Oracle Developer Server, the current Oracle Reports may be used for the web based solution**
- **Web Downloadable Software**
  - **Each user workstation accessing Oracle Reports on the web must have the JInitiator installed**

IMACS Web Enablement
Oracle Server Environment

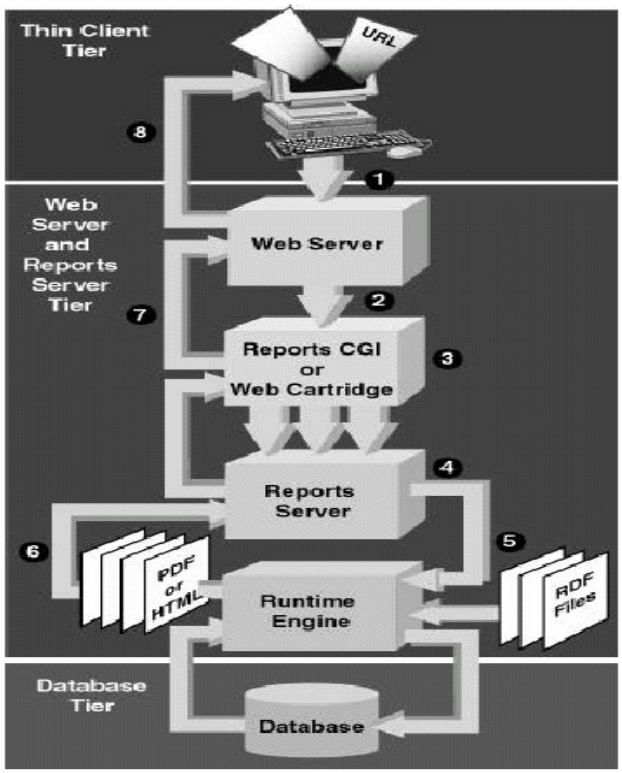


Figure 1: Web architecture, three machine configuration

Oracle Reports Release 6.0: Reports Server Configuration, Technical White Paper
July, 1999

- Client request report through browser by typing URL. The Web passes the URL to the Web server.
- The Web server invokes Reports CGI.
- The Reports CGI parses the request and submits it to the Reports Server.
- If the request includes time tolerance, Report Server will check the output cache before the report executes.
- The Report Server receives and queues the job request. It sends the command line to runtime engine when one becomes available.
- The runtime engine executes the report.
- The report CGI receives the report output from the report server and sends it to the Web Server.
- The Web server sends the report to Web browser.

IMACS Web Enablement

- CA Advantage Gen Web Client Enablement Tool **Version 6.5**
  - Beta Testing Complete September 2002
  - Over 50 Beta Customer Sites - Worldwide
  - Very Positive Response from Beta Customers
  - Approach Proven by Beta Test Sites

IMACS Web Enablement

- CA Advantage Gen Web Client Enablement Tool
  - Utilizes existing IMACS Application - No Redesign
  - Limits User Participation
  - Limits Customization Required
  - Shortens Development Time
  - Lowers Development Cost
  - Maintains dual Web-Client-Server Environments
  - Multiple platforms - J2EE, XML, .NET

IMACS Web Enablement

eb Enablement Tasks - Training

Training	Status
J AVA Software	Completed
CA Web Client Enablement Software	Scheduled DEC 10-12, 2002
Windows 2000	In progress
Oracle Software	In progress

IMACS Web Enablement

eb Enablement Tasks - Training Environme

Establish Training Environment	Status
Software	Acquiring
Hardware	Acquired
Upgrade Existing Software	In progress
Install New Hardware	In progress
Install New Software	In progress

IMACS Web Enablement

- **Web Enablement Tasks - Development Environment**
  - **Establish Development Support Environment**
    - **Acquire Software**
    - **Acquire Hardware**
    - **Upgrade Existing Software**
    - **Install New Hardware and Software**

IMACS Web Enablement

- **Web Enablement Tasks (Continued)**
  - **Coordinate with Current Development and Maintenance Activities**
    - **Development Workstations Upgrades**
    - **Development Servers Upgrades**

IMACS Web Enablement

- **Web Enablement Tasks (Continued)**
  - **Convert and Customize Application**
  - **Unit Software Testing**
  - **System Software Testing**
  - **User Acceptance Software Testing**
  - **Production Implementation and Deployment**

IMACS Web Enablement

- **Web Enablement Tasks (Continued)**
  - **Prepare Production Environment**
    - **Acquire Hardware/Software**
    - **Upgrade Hardware/Software**
    - **Install New Hardware**
    - **Install New Software**

IMACS Web Enablement

- **Web Enabled Production Environment**
  - **Focus is on the web server**
  - **Majority of the changes will involve the application customization and web server**
  - **Advantage Gen transaction server and Oracle database**
  - **The IMACS client environment will consist of a compatible web browser with the Oracle JInitiator Java JRE plug-in for the web browser.**

IMACS Web Enablement

- **Web Enablement Status**
  - **CA Web Client Enablement Tool Acquired**
  - **Client WCE software installed on a test w/s**
  - **Hardware/software upgrades in progress**
  - **Preparing Training environment**
  - **Planning development environment**
  - **DISA hardware/software SLA estimates obtained to support production environment**

IMACS Web Enablement

Original challenges and Current solutions

Issue	Solution
Response Time Issues	Improve Internet Backbone
Potential Security Issues	PKI and .MIL
Software Costs	Acquired
Labor Costs	Advantage Gen 6.5
Hardware Costs	Lease/SLAs/3rd Party Vendors

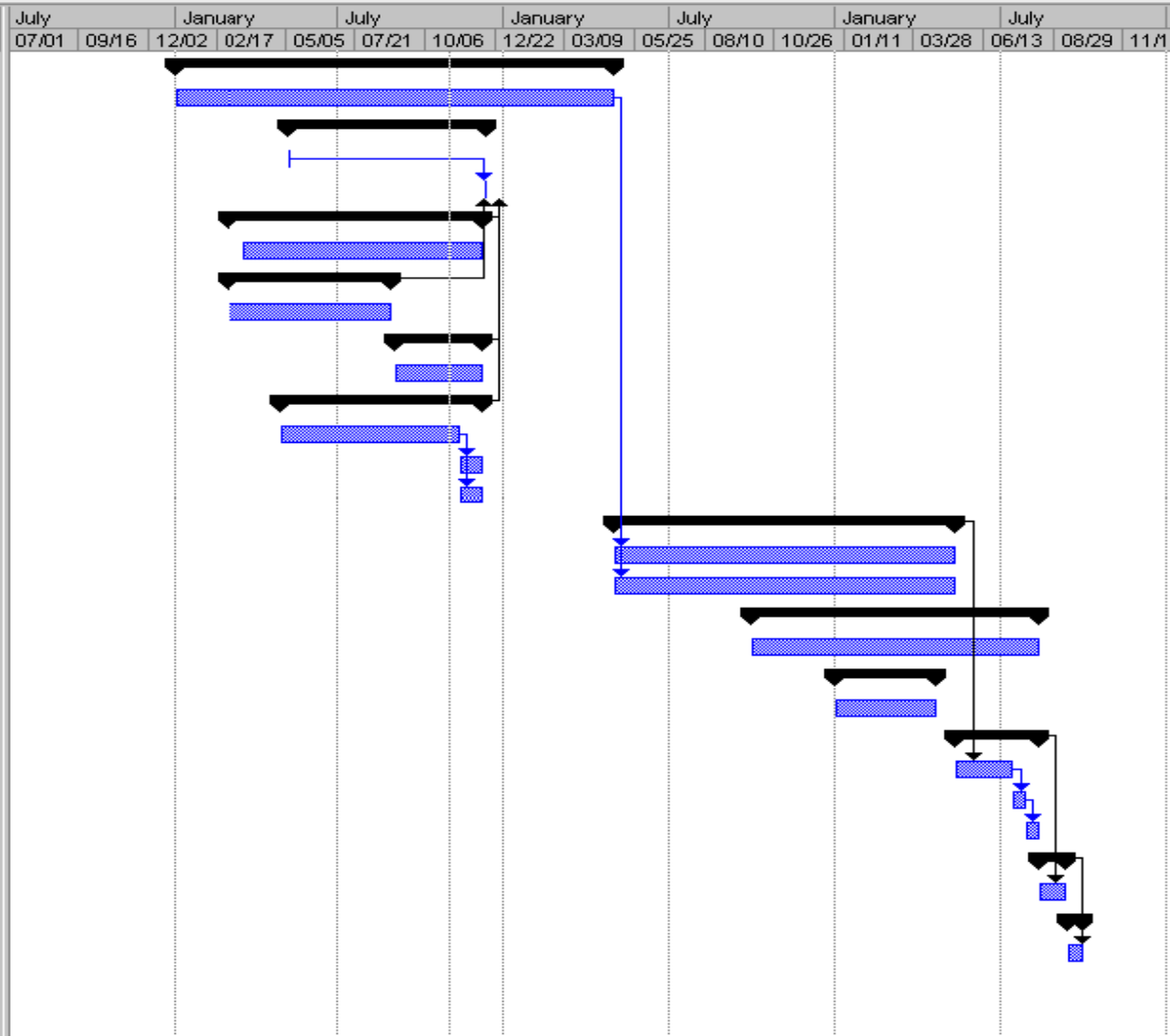
IMACS Web Enablement

- CA Advantage Gen Web Client Enablement Tool
  - Schedule
    - WCE Training Environment 4th quarter 2002
      - Client software loaded onto test platform
      - Server software will be loaded in conjunction with maintenance upgrades
    - WCE Development Environment 2nd quarter 2002
      - Load Client software
      - Server software will be loaded in conjunction with maintenance upgrades
    - Estimated Production Delivery 2004
      - Still Unknowns
      - Award Date Dependent

IMACS Web Enablement

Projected Schedule (Notional)

	Task Name
1	**Current Enhancement Activities**
2	Asset Visibility and Business Rule Development
3	**Training**
4	Java
5	CA Web Client Enablement Tool
6	**Preparation of WCE Deveopment Environment**
7	CREATE ENVIRONMENT
8	**Windows 2000 Devlopment W/S Upgrade**
9	WSUPGRADE
10	**Windows 2000 Development Server**
11	ACQUIRE AND LOAD SOFTWARE
12	**HP 9000 Developmen Server Upgrade**
13	HP UNIX 11.0- Training
14	Advantage Gen 6.5 Training
15	Oracle 8i- Training
16	**IMACS Web Client Enablement Development**
17	Web Client Enablement Application Development
18	Oracle Reports Conversion/Development
19	**Preparation of WCE Production Environment**
20	PROD ENV CREATION
21	**Windows 2000 Server Hardware/Software Production**
22	2000 SERVER
23	**HP 9000 Production Server Upgrade**
24	HP UNIX 11.0- Production
25	COOL:Gen 6.5- Production
26	Oracle 8i- Production
27	**User Acceptance Testing**
28	Testing
29	**Production Implementation**
30	Production Environment
31	
32	



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